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10/559,545	03/28/2006	Jan Berg	PAT-01093	9152
26922	7590	03/31/2008	EXAMINER	
BASF CORPORATION			GEISEL, KARA E	
Patent Department				
1609 BIDDLE AVENUE			ART UNIT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/559,545	Applicant(s) BERG ET AL.	
	Examiner KARA E. GEISEL	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,13-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,13-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1205</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Preliminary Amendment

The preliminary amendment filed on December 2nd, 2005, has been entered into this application.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

The certified copy has been filed on December 2nd, 2005.

Information Disclosure Statement

The information disclosure statement filed December 2nd, 2005 has been considered by the examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters in each drawing start with 1, such that 1 in a first drawing will refer to a different part than the 1 in another drawing, 2 in a first drawing will refer to a different part than the 2 in another drawing, etc. For example, "1" has been used to designate an adapter for installation, the base body, the base plate, an SMA-bush receiving means, and a light source; "2" has been used to designate a measuring window, a holder for the measuring window, a base body, and a spectrometer with an optical attenuator. **It is noted that the description of the drawings in the specification will need to be corrected as well.**

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(3) because the numbers and fig. titles are less than 1/8" tall.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

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not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: a brief description of the drawings is missing.

Appropriate correction is required.

Claim Objections

Claims 1, 3-10, 13-15, and 17 are objected to because of the following informalities: minor typographical errors.

In regards to claim 1, the system control unit comprises “detectors (Ca)”, but the rest of the claim only refers to "the detector" (see lines 19 and 21).

In regards to claim 15, it appears that applicant should have used the term "measuring" or "measured" instead of "registering" or "registered" (see claim 17, for example).

Appropriate correction is required.

Claims, which depend from objected to claims, inherit the problems of these claims, and are therefore, also objected to.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-10, 13-15, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Some examples of this are:

In regards to claim 1, "the optical unit being arranged on one side of the measuring window and the sample analysis cell being arranged on the other side of the measuring window, by said analysis cell being pressed against the measuring window in such a way that, between said measuring window and said analysis cell, a gap is formed which must be traversed by a sample to be measured in the form of a liquid pigment preparation, the sample being sheared considerably as it traverses the gap" is narrative, and "**being led**", from line 18, appears to be a direct translation.

In regards to claim 1, line 20, "(reflectance of product)", it is not clear whether reflectance of product is part of the claimed invention, since it is within parenthesis. Clarification is required.

In regards to claim 5, it is not clear if each of the fibers in the optical waveguides will have the same diameter or if the optical waveguides have fibers, wherein one of the fibers in the waveguide is 100 μm , another is 200 μm , another is 400 μm , etc. Clarification is required.

In regards to claim 7, the last line, what is "attenuated in a defined manner"?

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: how the compensation filter, the IR blocking filter, the condenser, and the scattering disk are connected with the rest of the sensor.

In regards to claim 8, it is not clear whether "1 to 12 mm thick and 10 to 80 mm in diameter" is part of the Markush group or not.

Claims, which are dependent from rejected claims inherit the problems of these claims, and are therefore also rejected under 35 U.S.C. 112, second paragraph.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-7, and 13-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 29-34, and 37-40 of copending Application No. 10/596,388 (see US Pubs 2008/0019887). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the current application is broader in scope than claim 37 of '388 and therefore can be read from claim 37. Furthermore, although claim 1 discloses that

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the analysis cell is removable, this feature is disclosed in claim 38 of '388, and therefore, it would have been obvious to one of ordinary skill at the time the invention was made to include this feature into claim 37 as it is disclosed, and further it would allow more versatility in the cleaning and types of measurements the sensor could perform.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In regards to claim 1, claim 37 (dependent on claim 29) of claim '388, discloses a reflectance sensor, comprising a) an optical unit (claim 29, line 3) (A) which comprises aa) a light source (Aa) comprising a lamp (line 4), and ab) a fiber-optic system comprising optical waveguides (line 5) (Ab), at least one optical waveguide being a reference waveguide (lines 6-7), b) a sample analysis unit (line 8) (B), comprising ba) a measuring window (Ba) (line 9), and bb) a sample analysis cell (Bb) (lines 10-11), the optical unit being arranged on one side of the measuring window and the sample analysis cell being arranged on the other side of the measuring window (lines 12-15), by said analysis cell being pressed against the measuring window in such a way that, between said measuring window and said analysis cell, a gap is formed which must be traversed by a sample to be measured in the form of a liquid pigment preparation (lines 15-21), the sample being sheared considerably as it traverses the gap (claim 37), and c) a system control unit (C) (line 24) comprising detectors (Ca) for recording measured data and an evaluation device (Cb) connected thereto (lines 24-26), at least one optical waveguide connection being led from the light source (Aa) to the measuring window (Ba) and from the measuring window (Ba) onward to the detector (Ca) (lines 27-30), to generate a measured signal (reflectance of product) (line 30), and at least one reference waveguide connection leading directly from the light source (Aa) to the detector (Ca) or from the measuring window (Ba) to the detector (Ca) to produce a reference signal (lines 30-34), wherein the analysis cell is removable (claim 38).

In regards to claim 3, claim 30 of '388 has a one-to-one correspondence.

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In regards to claim 4, claim 31 of '388 has a one-to-one correspondence.

In regards to claim 5, claim 32 of '388 has a one-to-one correspondence.

In regards to claim 6, claim 33 of '388 discloses that the fiber used as a reference waveguide has a diameter which is one of matched to, and smaller than, the remaining optical waveguides.

In regards to claim 7, claim 34 of '388 discloses that the sensor further comprises at least one of the following features: ac) a compensation filter arranged behind the lamp, that linearizes the spectrum from the lamp such that the difference between the highest and lowest intensity of the light emitted by the lamp is at most a factor 4 (lines 3-7), ad) an IR blocking filter, a condenser and a scattering disk arranged behind the lamp or between lamp and compensation filter if a compensation filter is used (lines 8-9 and 16-18), ae) the optical waveguides are led in protective tubes and supported over their entire length by means of a supporting frame (lines 10-12), af) the reference waveguide is led via a precise spacing element with incorporated scattering disk, and attenuated in a defined manner (lines 13-15).

In regards to claim 13, claim 39 of '388 has a one-to-one correspondence.

In regards to claim 14, claim 40 of '388 has a one-to-one correspondence.

Additional Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art made of record is Selgin (USPN 3,773,424), Ishak (USPN 3,885,878), Taylor et al. (USPN 4,936,685), and Hustert (USPN 6,583,878).

Selgin discloses a reflectance sensor, comprising a) an optical unit (A) which comprises aa) a light source (Aa) comprising a lamp, and ab) an optical system (Ab), b) a sample analysis unit (B), comprising ba) a measuring window (Ba), and bb) a sample analysis cell (Bb), the optical unit being arranged on one side of the measuring window and the sample analysis cell being arranged on the other side of the measuring window, by said analysis cell being pressed against the measuring window in such a way that, between said measuring window and said analysis cell, a gap is formed which must be

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traversed by a sample to be measured in the form of a liquid pigment preparation, the sample being sheared considerably as it traverses the gap, and c) a system control unit (C) comprising detectors (Ca) for recording measured data and an evaluation device (Cb) connected thereto.

Ishak generally discloses a sensor for measuring the color of a liquid pigment preparation.

Taylor discloses reflectance sensor, comprising a) an optical unit (A) which comprises aa) a light source (Aa) comprising a lamp, and ab) an optical system b) a sample analysis unit (B), comprising ba) a measuring window (Ba), and bb) a sample analysis cell (Bb), the optical unit being arranged on one side of the measuring window and the sample analysis cell being arranged on the other side of the measuring window, by said analysis cell being pressed against the measuring window in such a way that, between said measuring window and said analysis cell, a gap is formed which must be traversed by a sample to be measured in the form of a liquid pigment preparation, the sample being sheared considerably as it traverses the gap, and c) a system control unit (C) comprising detectors (Ca) for recording measured data and an evaluation device (Cb) connected thereto.

Hustert discloses a reflectance sensor, comprising a) an optical unit (A) which comprises aa) a light source (Aa) comprising a lamp, and ab) an optical system, b) a sample analysis unit (B), comprising ba) a measuring window (Ba), and bb) a sample analysis cell (Bb), the optical unit being arranged on one side of the measuring window and the sample analysis cell being arranged on the other side of the measuring window, by said analysis cell being pressed against the measuring window in such a way that, between said measuring window and said analysis cell, a gap is formed which must be traversed by a sample to be measured in the form of a liquid pigment preparation, the sample being sheared considerably as it traverses the gap, and c) a system control unit (C) comprising detectors (Ca) for recording measured data and an evaluation device (Cb) connected thereto, wherein the analysis cell is removable.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kara E Geisel whose telephone number is **571 272 2416**. The examiner can normally be reached on Monday through Friday, 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on **571 272 2800 ext. 77**. The fax phone number for the organization where this application or proceeding is assigned is **571 273 8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Kara E Geisel/
Patent Examiner,
Art Unit 2877**

March 28, 2008